AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A lithographic printing original plate having a photosensitive layer formed on a support,

wherein the photosensitive layer comprises the heat cured product of a photosensitive resin composition,

wherein the photosensitive resin composition comprises a hydrophilic resin having crosslinking groups that can react with a cross-linking agent, a hydrophilic resin having no functional groups that can react with a cross-linking agent, a melamine resin, organic fine particles and a photothermal conversion material,

wherein the hydrophilic resin having cross-linking groups that can react with a cross-linking agent is obtained by polymerizing a monomer containing a cross-linking monomer having a hydroxyl group, and

wherein the hydrophilic resin having no functional groups that can react with a crosslinking agent is obtained by polymerizing at least one monomer containing a N-alkyl or Nalkylene substituted (meth)acrylamide compound selected from the group consisting of monomers represented by formulae (1) and (2),

formula 1

$$CH_2 = C - CON R_3$$

Docket No.: 1155-0304PUS1

wherein R_1 represents a hydrogen atom or a methyl group, and R_2 and R_3 each individually represents a hydrogen atom or a lower alkyl or alkoxy group,

formula 2

$$CH_2 = C - CON A$$
 (2)

wherein R_1 represents a hydrogen atom or a methyl group, and A represents $(CH_2)_n$, and wherein n represents an integer of 4 to 6 or $(CH_2)_2O(CH_2)_2$

wherein the surface of the photosensitive layer forms a phase separation structure, and when the lithographic printing original plate is subjected to printing using a fountain-solution, a portion derived from either one of the components that constitute the phase-separation on the surface of the printing plate after printing produces recessed parts on the surface of the photosensitive layer and the surface of the photosensitive layer has a property to be changed to have affinity for ink by irradiation with light or thermal energy.

2. (Currently Amended) A lithographic printing original plate according to claim 1, wherein the photosensitive layer has a [[the]] phase-separation structure [[is]] in a sea-island form, there are at least five island portions having a diameter of 0.5 μ m or more to 10 μ m or less in an area of 2,500 μ m² on any surface of the photosensitive layer, wherein the diameter means a MSW/VP/sh

short axis when the island portion has an elliptic shape with a long axis and a short axis, and at least a part of the island portions produces recessed parts on the surface of the lithographic printing original plate after printing when the plate is subjected to printing using a fountain solution.

- 3. (Original) A lithographic printing original plate according to claim 2, wherein the mean value of the short axes of the island portions is $0.5 \mu m$ or more to $10 \mu m$ or less.
 - 4. (Cancelled)
- 5. (Currently Amended) A lithographic printing original plate according to [[claim 4]] claim 1, wherein the hydrophilic resin having no functional groups that can react with a cross-linking agent is obtained by further reacting [[further]] one or more kinds of compounds selected from [[the]] compounds having following general formula (3) [[and/or]] or salts thereof:

 [formula 3]

[[, wherein,]] wherein R represents a hydrogen atom or a lower alkyl group; n represents an integer of 1 to 8.

Docket No.: 1155-0304PUS1

- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Original) A lithographic printing plate that is obtained by irradiation with light or thermal energy to the lithographic printing original plate according to claim 1.
- 9. (Currently Amended) A photosensitive resin composition [[containing]] comprising:
- a hydrophilic resin obtained by reacting a N alkyl or N alkylene substituted (meth)acrylamide compound represented by following general formula (1) and/or 2 and a hydrophilic resin having cross linking groups that react with at least a cross linking agent, which further contains a cross linking agent and a photothermal conversion material for cross-linking, having cross-linking groups that can react with a cross-linking agent, obtained by polymerizing a monomer containing a cross-linking monomer having a hydroxyl group.

a hydrophilic resin for non-cross-linking, having no functional groups that can react with a cross-linking agent, obtained by polymerizing at least one monomer containing a N-alkyl or N-alkylene substituted (meth)acrylamide compound selected from the group consisting of monomers represented by formulae (1) and (2).

formula 1

$$CH_2 = C - CON R_3$$

wherein R₁ represents a hydrogen atom or a methyl group, and R₂ and R₃ each individually represents a hydrogen atom or a lower alkyl or alkoxy group,

formula 2

$$CH_2 = C - CON A$$

wherein R_1 represents a hydrogen atom or a methyl group, A represents $(CH_2)_n$, and n represents an integer of 4 to 6 or $(CH_2)_2O(CH_2)_2$.

a melamine resin,

organic fine particles, and

a photothermal conversion material

Docket No.: 1155-0304PUS1

Docket No.: 1155-0304PUS1

-[formula 4]

$$\begin{array}{c|c}
R_1 & R_2 \\
CH_2 = C - CON & (1) \\
R_3 & \end{array}$$

, wherein, R_1 -represents a hydrogen atom or a methyl-group; R_2 and R_3 -represent a hydrogen atom or a lower alkyl or a lower alkoxy group.

[formula 5]

$$\begin{array}{c|c}
R_1 \\
\hline
CH_2 = C - CON A
\end{array}$$

wherein, R₁-represents a hydrogen atom or a methyl group; A represents (CH₂)_n, wherein n represent an integer of 4 to 6 or (CH₂)₂O(CH₂)₂.

10. (Cancelled)